

TBL's Proposed Methodology for Calculating
Available Transmission Capacity
Comments of the Public Generating Pool
October 3, 2003

The Public Generating Pool (PGP)¹ submits the following comments on the Bonneville Power Administration (BPA) Transmission Business Line's (TBL's) proposed new methodology for calculating Available Transmission Capacity (ATC). Although significant time and effort has clearly been invested by BPA in the new methodology, several significant questions and concerns remain. TBL should address these concerns and answer these questions before finalizing any new methodology.

1. The PGP has, alone or with other public power groups, developed three sets of questions regarding the new methodology, which have been posted on TBL's web site under "Contract Lock". These questions should be answered in writing by TBL before a draft methodology is released.
2. TBL should prepare a complete written version of the methodology, post it in draft form, and open a comment window of at least two weeks. This is consistent with TBL's historical approach to developing transmission business practices. The proposed ATC methodology carries implications for both reliability and costs of a magnitude similar to TBL business practices, and should be treated similarly from a procedural perspective.
3. A critical part of the new methodology is the process for updating data, revising assumptions, and (re)posting ATC. Because we expect that this methodology will continue to be revised over time, TBL should ensure that regular review and comment periods are built into the methodology before it is finalized. The methodology should not automatically be revised without input from customers.
4. Before finalizing the new methodology, TBL should calculate and post the implicit ATC on all parallel paths to its own system, so that non-federal owners of transmission can understand the impacts of the methodology on their own systems. Modifications to the methodology may be necessary to ensure reliable operations of non-federal systems.
5. As soon as practical, and no later than the implementation of the new ATC methodology, TBL should begin collecting records on actual redispatch and curtailments on its own system, so that all market participants will have the same information about how different transactions are treated, and will be able to understand how TBL implements its obligations under its Open Access Transmission Tariff.

¹ Cowlitz County PUD, Douglas County PUD, Grant County PUD, Pend Oreille County PUD, and Seattle City Light.

6. The proposed formula for setting aside Transmission Reliability Margin (TRM) is not satisfactory. TBL has proposed a two-part approach:

?? If "planning ATC" exceeds "contract accounting ATC", then TRM will be set at 30% of the difference between the two.

?? If "contract accounting ATC" exceeds "planning ATC", then TRM will be set to zero.

This formula does not provide sufficient protection for the purposes identified in the Western Electricity Coordinating Council's (WECC's) "Determination of Available Transfer Capability Within The Western Interconnection", June 2001. The PGP appreciates that a complete and accurate implementation of the WECC description of TRM would be a tremendous challenge. However, the simplifying assumptions inherent in the proposed formula do not pay sufficient attention to the specific uncertainties listed in the WECC approach, and are thus not capable of achieving the objectives identified by WECC (p. 8):

TRM is the amount of transmission transfer capability necessary to provide a reasonable level of assurance that the interconnected transmission network will be secure under a broad range of uncertainties in system conditions. TRM accounts for the inherent uncertainty in system conditions and system modeling, and the need for operating flexibility to ensure reliable system operation as system conditions change.

The PGP is especially concerned about the lack of direct attention to the need for TRM for operating reserves and uncertainties in load forecasts, especially in light of TBL's proposal to use historical peak demands for certain non-federal hydroelectric projects, rather than contract demands, when calculating ATC. The resulting underestimate of TRM reinforces the proposal to use historical peak generation levels, which will significantly underestimate of transmission capacity that is already under contract to TBL's customers, who rely on these hydro resources to meet their obligations to serve native load customers in a cost-effective manner.

The PGP recommends that the proposed TRM methodology be modified as follows:

?? If planning ATC exceeds contract accounting ATC, then TRM will be set at 50% of the difference between the two.

?? If contract accounting ATC exceeds planning ATC, then TRM will be set at the amount required on the path to provide operating reserves. Further discussion is required to develop a consistent methodology for this element of the methodology.

The first change reflects a more reasonable approach to choosing between the two alternatives: when it is not clear which of two methods is appropriate, a rough rule-of-thumb is to split the difference between the two. TBL's methodology is biased toward overstating the amount of ATC that will be made available to meet existing requests for service. The second change is intended to set aside TRM for existing customers' obligations under TBL's tariff to purchase or self-supply operating reserves. Without such a set-aside, TBL's customers may be forced to meet a tariff obligation, but TBL would not be required to provide transmission capacity to support such an obligation. This result is odd at best, and internally inconsistent at worst. TBL should not impose obligations on its customers and then undermine their ability to meet such obligations.

7. The final version of the new ATC methodology should strike a reasonable balance between assumptions that tend to overstate and understate ATC. The PGP is concerned about assumptions that tend to overstate ATC, including the proposal to set TRM at zero on the Cross Cascades paths in the winter, the use of historical operations of non-federal hydro projects rather than contract demand amounts in the power flow studies, and the understatement of TRM through the proposed formula (see above).
8. Before finalizing the methodology, TBL should post the data base used to determine the "historical generation" amounts used in the power flow studies. It is likely that some of this data came from individual customers. However, TBL should consider whether data submitted by customers for one purpose (long-term planning studies and decisions on transmission expansion) is necessarily appropriate for use in a short-run commercial context where contract rights are at stake. If customers face the potential for their contract rights to be undermined by this process, they will be less willing to cooperate in planning studies that are critical for the long-term reliability of the system.
9. TBL should develop a proposal, in cooperation with its customers, to address the situation in which (a) a long-term transmission customer has purchased transmission capacity to permit the wheeling of the entire capability of a generating project, but (b) TBL has assumed that only some historical generation peak amount should be included in the power flow studies, and yet (c) the customer needs to call on the entire contract demand amount to meet its obligation to serve (e.g., to provide operating reserves, to offset operating restrictions on other generation resources, or to avoid spill). If TBL has sold off the transmission capacity needed for such a

transaction and is unable to fulfill its obligations under all of its long-term contracts, then TBL should develop a mechanism to compensate the transmission customers whose ability to use their contract rights is impaired. It is not the case that the only means for meeting long-term contract obligations is the construction of additional transmission capacity. TBL could decide to fulfill its contractual obligations by redispatch of federal power in support of both PTP and NT schedules. At this point, we simply do not have adequate information to quantify the financial consequences of these different approaches. This is especially important in those situations where the sale of ATC increases the risk of curtailments in load pockets where customers do not enjoy competitive markets for redispatch. TBL should take into account the likelihood of a more frequent exercise of existing local market power, and address the consequences of this problem, before finalizing the methodology.

10. TBL should establish the following schedule for finalizing the new methodology:
 - ?? TBL answers the questions already submitted, and responds to these and other comments, in writing (approximately mid-October 2003).
 - ?? TBL releases a complete draft of the methodology, including a narrative, all formulas, and the resulting ATC amounts by month, by path, for 20 years (approximately November 1, 2003). Specific examples would also be helpful. TBL opens a comment period of at least two weeks on the draft methodology.
 - ?? TBL revises the draft methodology, responds in writing to comments, and posts the final methodology (approximately December 1, 2003).
11. In situations where the NT customer has developed its own load forecast, pursuant to its obligations under the OATT, TBL should use that forecast without alteration. If TBL is concerned about the accuracy of the customer's forecast, TBL should consult with the customer to resolve such concerns. However, TBL should not substitute its own forecast for that of the customer.